

REMARKS

Reconsideration and withdrawal of the rejections set forth in the Office Action dated July 6, 2007 are respectfully requested.

I. Amendments to the Claims

Claims 1-14 are canceled without prejudice or disclaimer.

New claims 15- 21 have been added. Support for the new claims can be found, e.g., in the paragraphs identified in the following table.

No new matter has been added has been added by the amendments.

Claim	Support
15	[0038], [0050]-[0053], [0067]-[0069]
16	[0038]
17	[0038]
18	[0039]-[0043]
19	[[0039]-[0043]
20	[0052]
21	[0053]

II. Rejections Under 35 U.S.C. § 102

Claims 1-14 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Loraine et al. (U.S. Pub. No. 2004/0049354).

The rejection is traversed.

A. The Present Claims

The present claims, as exemplified by independent claim 15, relate to a method in a computer system for displaying a graphical representation of expression levels of a plurality of splice variants of a gene in one or more samples, each of the plurality of splice variants of the gene having modules and exons, the method comprising: identifying modules and exons for each splice variant of the gene, each module or exon representing a subsequence of the splice variant and having a length L_s , applying a mathematical function to the length L_s of each subsequence to obtain a scaled length L_s' of each subsequence for graphical representation, determining a relative expression level for each module or exon by applying a mathematical algorithm to expression level data for exon-exon junction indicator polynucleotides, and displaying a graphical

representation wherein the modules or exons of the splice variants are aligned with corresponding modules or exons of other splice variants of the gene and wherein the representation indicates the relative expression levels of the modules and exons

B. Summary of the Cited Art

Loraine et al. (U.S. Pub. No. 2004/0049354) describes computer implemented methods for analyzing splice variant data received by an input manager. The methods appear to tie known functional and experimental information to data obtained using probe sets (e.g., ¶ [0006]).

C. Analysis

The standard for lack of novelty, that is, for anticipation, is one of strict identity. To anticipate a claim for a patent, a single prior source must contain all its essential elements. M.P.E.P. § 2131.

The rejection is traversed because the cited reference does not teach all the elements of the pending claims.

In particular, Loraine et al. do not teach:

- 1) identifying exons and modules for each splice variant of the gene, each exon and module representing a subsequence of the splice variant,
- 2) applying a mathematical function to the length Ls of each subsequence to obtain a scaled length Ls' of each subsequence for graphical representation,
- 3) determining a relative expression level for each module or exon by applying a mathematical algorithm to expression level data for exon-exon junction indicator polynucleotides, or
- 4) displaying a graphical representation wherein the modules or exons of the splice variants are aligned with corresponding modules or exons of other splice variants and indicate the relative expression levels of the modules and exons.

Loraine et al. teach none of the above features, which are explicit requirements of the pending claims. In particular:

- Loraine et al. teach scaling based on base-count (e.g., at ¶¶ [0137], [0138], and Fig. 12), not on the basis of exons and modules (i.e., subsequences) which are individually scaled to allow the representation of subsequences having large differences in length.
- The "functional domains" of Loraine et al. refer to annotation data (e.g., at ¶¶ [0150]), not particular subsequences.
- Loraine et al. are silent as to determining a relative expression level for each module or exon by applying a mathematical algorithm to expression level data for exon-exon junction indicator polynucleotides.

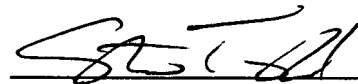
Since the reference does not teach the claimed method, Applicants respectfully request withdrawal of the anticipation rejection.

III. Conclusion

Applicants believe the application is in condition for allowance, early notice to that effect is earnestly requested. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (650) 838-4328.

Respectfully submitted,

Date: Oct. 09, 2007



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